

CHAPTER 7 – AIRPORT LAYOUT PLAN DRAWINGS

7.0 INTRODUCTION

The Airport Layout Plan (ALP) drawing set depicts existing airport facilities and proposed development at Ontario Municipal Airport. The ALP is a culmination of this planning effort and enables the Airport Sponsor and FAA to plan for airport facility improvements, anticipate budgetary and procedural needs, and protect relevant airspace. The set of technical drawings was developed according to FAA standard operating procedures and includes the following sheets:

AF-1	Cover Sheet and Index
AF-2	Airport Layout Plan
AF-3	Airport Data Sheet
AF-4	Airport Airspace Plan
AF-5	Runway 15 Inner Approach Surface
AF-6	Runway 33 Inner Approach Surface
AF-7	Runway 15 End Departure Surface
AF-8	Runway 15 End Departure Surface
AF-9	Runway Centerline Plan and Profile
AF-10	Terminal Area Plan
AF-11	Terminal Area Plan
AF-12	Land Use Plan
AF-13	Exhibit A – Airport Property Inventory Map

FAA grant assurances require that an Airport Sponsor maintain a current ALP, which can be for a period of 5 years or longer if no major improvements to the airfield are made. The ALP is a set of planning drawings and is not intended to provide information with design engineering accuracy.

7.1 COVER SHEET AND INDEX

The Cover Sheet includes approval signature blocks for the Airport Sponsor and FAA ADO, airport location and vicinity maps, and content information.

7.2 AIRPORT LAYOUT PLAN

The ALP drawing is a scaled graphic representation of existing and future airport facilities that contains pertinent clearance and dimensional information required to show design standard conformance. The proposed facility improvements integrated into the phasing schedule are depicted in the ALP as either future short-term or ultimate long-term development. In addition to airport buildings and facilities, the ALP identifies Runway 15/33 safety areas, Part 77 approach surface obstructions, and the existing and future airport property boundary based on areas of proposed land acquisition.

Ontario Municipal Airport will be able to apply the FAA-approved ALP as a blueprint for airport development to ensure future improvements remain consistent with FAA design standards and safety requirements, as well as airport and community land use plans. The information included in the ALP will also be used by the FAA as the basis and justification for future funding assistance at Ontario Municipal Airport.

7.3 AIRPORT DATA SHEET

The Airport Data Sheet is a continuation of basic airport and runway data tables associated with the ALP drawing. The information included in this sheet has been provided in accordance with FAA Standard Operating Procedures 2.00 —



Standard Procedure for FAA Review and Approval of Airport Layout Plans. As such, tables were developed that summarize airport, runway, taxiway and taxilane, airport facilities, declared distances, and wind coverage data. IFR, VFR, and All-Weather wind roses for 10.5, 13, 16, and 20 knots are also included on the Airport Data Sheet.

7.4 AIRPORT AIRSPACE PLAN (PART 77)

The Airport Airspace Plan is a graphic depiction of the imaginary surfaces established by the FAA in FAR Part 77 to protect the airspace near airports from existing natural and manmade objects.

The Airport Airspace Plan is both a land use planning tool for local authorities and a review mechanism for the Airport Sponsor to determine if proposed development near Ontario Municipal Airport presents a hazard to aircraft. The FAR Part 77 imaginary surfaces depicted in the Airport Airspace Plan include the primary, approach, transitional, horizontal, and conical surfaces.

These imaginary surfaces emanate from the runway centerline and are sized according to runway category and type of approach available or planned to a runway end. The existing and future dimensions of each imaginary surface are based on a Non-Precision instrument runway with visibility minimums greater than ¾-miles.

- The **Primary Surface** is longitudinally centered on the runway and extends 200 feet beyond each runway end. The elevation of any point on the primary surface is the same as the elevation of the nearest point on the runway centerline. The width of this surface is determined by the runway type and

approach; therefore, the primary surface is 500 feet at Ontario Municipal Airport.

- The **Approach Surface** is longitudinally centered on the extended runway centerline and extends outward and upward from each end of the primary surface. The dimensions of the approach surface are based on runway type and approach. The inner edges of the approach surfaces on Runway 15/33 match the 500-foot width of the primary surface. This surface extends outward and upward for 10,000 feet at a slope of 34 to 1 and to a width of 3,500 feet.
- The **Transitional Surface** begins at the same elevation as the runway and rises 150 feet from that point at a slope of 7 to 1. At that height, the transitional surface is replaced by the horizontal surface.
- The **Horizontal Surface** is a level horizontal plane 150 feet above the established airport elevation. The perimeter of this surface is determined by swinging arcs with a 10,000-foot radius from the center of the primary surface of each runway end and connecting the adjacent arcs with lines of tangency.
- The **Conical Surface** extends outward and upward from the horizontal surface's periphery at a slope of 20 to 1 for a total horizontal distance of 4,000 feet.

Malheur County should do all in its power as Airport Sponsor to ensure development stays below the FAR Part 77 surfaces to protect the role of the Airport. Any penetration to the CFR Part 77 imaginary surfaces, whether manmade or natural growth, is classified as an "obstruction," presumed to be a hazard to navigation, and is subject to an FAA aeronautical study which will determine whether the obstruction is in fact considered a hazard. If the FAA determines an obstruction is not a hazard,



the Airport Sponsor is not required to prevent or clear the penetration.

7.5 RUNWAY PLAN AND PROFILES

The Inner-Approach Surface Plan and Profile drawings show the existing, future, and ultimate approach surface configuration and their interaction with the airport and off-airport environs. The extended runway centerline ground profile and the critical point profiles are shown for terrain clearance purposes. Notable objects in this regard are shown in each plan and profile and then tabulated with heights and disposition, as appropriate. These drawings are supplemental to the Airport Airspace Plan. Obstructions of concern are trees and terrain; these are planned for lowering or lighting over the near-term of this planning.

The Runway Centerline Profile drawing depicts surface longitudinal grades on centerline, edge of runway pavement, and edge of Runway Safety Area. The Line-of-Sight standard is also depicted.

7.6 TERMINAL AREA PLAN

The Terminal Area Plan has been divided into two sheets to provide large-scale plan views of east and west landside development. These drawings are an enlargement of existing and planned facilities depicted on the ALP drawing, which include aprons, taxiways, hangars, and other landside improvements.

The Terminal Area Plan, as a larger replication of specific landside areas within the ALP drawing, similarly enables the Airport Sponsor and FAA to plan for future facility improvements at Ontario Municipal Airport. Implementation of the proposed development will be based on

funding availability and justified by increasing activity levels.

7.7 LAND USE PLAN

The Land Use Plan AF-12 identifies areas within and adjacent to airport property by zone and/or land use. Although not anticipated close by, review for any residential development near the airport should consider the airport's proximity and noise sensitivity. The Ontario Land Use compatibility zones, as they apply to the airport are depicted for inclusion into area comprehensive planning. Land uses within these zones should be protected by jurisdictional ordinance or code in pursuit of compatible land use. Areas off the end of each runway are generally the most noise sensitive. The City of Ontario has considered a formal overlay district in place to serve this purpose. The City of Ontario and Malheur County should also be encouraged to formally adopt an airport overlay district to protect airport operations and growth.

Federal Land Use Polices

FAA usually gives technical and advisory assistance to protect its funding to encourage compatible land development around airports, but it has no regulatory authority for controlling land uses to protect airport capacity. It plays a part in regulating on-airport land, through the approval of the Airport Layout Plan (ALP), inclusion into the NPIAS, and associated apportionments from the AIP grant funding supported by the Airport and Airway Improvement Act (AAIA). Eligibility to access these opportunities, require airport sponsors to remain in compliance with the 39 Grant Assurances and in this case; measures to maintain, to the extent reasonable, off-airport land use compatibility and to protect that



aeronautical function of an airport by restricting the location of non-aviation land uses. The FAA recognizes that state and local governments are responsible for land use planning, zoning, and regulation including that necessary to provide land use compatibility with airport operations.

Oregon State Land Use Policies

The State of Oregon has a lead role in promoting land use compatibility around the airports in the state. This role derives from the state’s broad interest in all modes of transportation in recognition of the benefits that transportation brings the state and its citizens. The specific responsibility as the primary steward and advocate of the state’s aviation interests is assigned to the Oregon Department of Aviation (ODA). ODA’s role extends to advocating for promotion of safe air transportation, preservation of aviation facilities, provision of airport capacity to meet demand, and technical assistance.

Local Government Land Use Policies

The ultimate responsibility for airport land use compatibility rests with local government bodies such as the City of Ontario and, and the county of Malheur. Although local comprehensive plans, plan policies, and regulations must be consistent with state law and countywide planning policies, local government has discretion to determine how development occurs within the community. Also, the federal preemption doctrine does not affect the local government’s ability to use its police powers, particularly land use controls, to anticipate, abate, mitigate, and otherwise respond to other land use concerns provided they are reasonable and do not restrict airport operations.

The Malheur County Airport Zoning Ordinance establishes airspace obstruction zones and land use safety zones that regulate housing density,

structure heights, nonconforming obstructions, and land uses. The airspace protection zones regulate the airspace within the FAR Part 77 imaginary surfaces, while the land use safety zones protect the land underlying these airspace protection zones.

All land in unincorporated areas of Malheur County is classified as multi-use and unrestricted by the County’s Planning and Zoning Ordinance. While this does include all land surrounding the Airport, the protections outlined in the County’s Airport Zoning Ordinance take precedence.

7.8 EXHIBIT A – AIRPORT PROPERTY MAP

The Exhibit A – Airport Property Map is an inventory of land parcels within the dedicated airport property boundary federally obligated for compliance under the terms and covenants of a grant agreement. This map identifies existing easements and encumbrances, previously acquired parcels, areas released for non-aviation use under Section 163, and property proposed for future acquisition. The parcel and property specific information identified in the drawing has been provided in accordance with FAA Standard Operating Procedures 3.00 — *Standard Procedures for FAA Review of Exhibit ‘A’*.

7.9 RECYCLING PLAN

A Recycling Plan for the Ontario Municipal Airport was developed as a part of this study, as specified by the FAA AIP Handbook.

7.10 SUMMARY

This study provided a comprehensive long-term assessment of the facilities at the Ontario Municipal Airport. It described the infrastructure plans to meet the projected future demands and



provided the framework needed to guide Airport development. The study also considered the potential environmental, financial, and socioeconomic impacts meeting all Federal Aviation Administration (FAA) facility requirements.

The goal was to optimize the operational efficiency, effectiveness, capability and safety of the airport, enhance the economic and social value of the airport and meet the long-term aviation and multi-modal transportation needs of the community. Additional goals were to optimize the airport's income to continue towards financial self-sufficiency, ensuring that the current and future airport plans are environmentally compatible in the region.